TDMS No. 97003 - 08
Test Type: CHRONIC
Route: SKIN APPLICATION
Species/Strain: MICE/B6C3F1

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

Pathologist: SELLS, D. - JOKINEN, M.

- JOKINEN, IVI.

F#1 M3

C Number: C97003D

Lock Date: 01/31/2005

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Date Report Reqsted: 08/28/2006 Time Report Reqsted: 08:51:09 First Dose M/F: 06/25/02 / 06/24/02

Test Type: CHRONIC Route: SKIN APPLICATION Species/Strain: MICE/B6C3F1

TDMS No. 97003 - 08

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

Pathologist: SELLS, D. - JOKINEN, M.

Date Report Reqsted: 08/28/2006 Time Report Reqsted: 08:51:09 First Dose M/F: 06/25/02 / 06/24/02

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Disposition Summary					
Animals Initially in Study	50	50	50	50	
Early Deaths					
Accidently Killed		1			
Moribund Sacrifice	8	12	8	7	
Natural Death	7	7	3	3	
Survivors					
Moribund Sacrifice	1	00	00	40	
Terminal Sacrifice	34	30	39	40	
Animals Examined Microscopically	50	50	50	50	
LIMENTARY SYSTEM					
Esophagus	(50)	(50)	(50)	(50)	
Gallbladder	(49)	(49)	(48)	(49)	
Inflammation	3 (6%)		3 (6%)	2 (4%)	
Intestine Large, Cecum	(50)	(50)	(50)	(50)	
Hyperplasia, Lymphoid				1 (2%)	
Intestine Large, Colon	(50)	(50)	(50)	(50)	
Intestine Large, Rectum	(50)	(50)	(50)	(50)	
Intestine Small, Duodenum	(50)	(50)	(50)	(50)	
Ectopic Tissue			1 (2%)		
Intestine Small, Ileum	(50)	(49)	(50)	(50)	
Inflammation	1 (2%)				
Ulcer	1 (2%)				
Peyer's Patch, Hyperplasia, Lymphoid	1 (2%)	(50)	(50)	(50)	
Intestine Small, Jejunum	(50)	(50)	(50)	(50)	
Peyer's Patch, Hyperplasia, Lymphoid	(FO)	1 (2%)	4 (8%)	2 (4%)	
Liver Basophilic Focus	(50) 1 (2%)	(50)	(50) 5 (10%)	(50) 4 (8%)	
Clear Cell Focus	1 (2%) 34 (68%)	4 (8%) 22 (44%)	29 (58%)	4 (8%) 24 (48%)	
Eosinophilic Focus	21 (42%)	9 (18%)	29 (56%) 16 (32%)	24 (46%) 16 (32%)	
Fatty Change, Focal	11 (22%)	9 (1070)	4 (8%)	6 (12%)	
Fatty Change, Diffuse	19 (38%)	15 (30%)	11 (22%)	14 (28%)	
Hematopoietic Cell Proliferation	3 (6%)	9 (18%)	2 (4%)	1 (2%)	
Infarct	1 (2%)	3 (1373)	2 (170)	. (270)	
Infiltration Cellular, Mononuclear Cell	1 (2%)				
Inflammation	31 (62%)	19 (38%)	27 (54%)	28 (56%)	

a - Number of animals examined microscopically at site and number of animals with lesion

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Route: SKIN APPLICATION
Species/Strain: MICE/B6C3F1

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

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Date Report Reqsted: 08/28/2006 **Time Report Reqsted:** 08:51:09 **First Dose M/F:** 06/25/02 / 06/24/02

Mineralization					
	1 (2%)				
Mixed Cell Focus	14 (28%)	9 (18%)	13 (26%)	12 (24%)	
Necrosis	3 (6%)	9 (18%)	5 (10%)	7 (14%)	
Pigmentation	4 (8%)	3 (6%)	3 (1070)	7 (1470)	
Tension Lipidosis	3 (6%)	5 (10%)	3 (6%)	3 (6%)	
Bile Duct, Cyst	1 (2%)	3 (1070)	3 (070)	3 (070)	
Hepatocyte, Hypertrophy	1 (270)	1 (2%)			
Mesentery	(10)	(3)	(4)	(2)	
Fat, Necrosis	9 (90%)	3 (100%)	3 (75%)	1 (50%)	
Pancreas	(50)	(50)	(50)	(50)	
Hyperplasia	1 (2%)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell	7 (14%)		2 (60/)	6 (100/)	
			3 (6%)	6 (12%)	
Inflammation	2 (4%)			4 (20/)	
Vacuolization Cytoplasmic		0 (40()		1 (2%)	
Acinus, Atrophy		2 (4%)		1 (2%)	
Duct, Cyst	(50)	(50)	(50)	1 (2%)	
Salivary Glands	(50)	(50)	(50)	(50)	
Atrophy	()	1 (2%)	()	1 (2%)	
Infiltration Cellular, Mononuclear Cell	35 (70%)	28 (56%)	39 (78%)	40 (80%)	
Necrosis	4	1 (2%)	. >	4	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Hyperplasia, Squamous	1 (2%)	1 (2%)	1 (2%)	1 (2%)	
Inflammation	2 (4%)				
Ulcer				2 (4%)	
Stomach, Glandular	(50)	(50)	(50)	(50)	
Cyst			1 (2%)		
Erosion		1 (2%)	1 (2%)	1 (2%)	
Inflammation	1 (2%)	1 (2%)			
Mineralization				1 (2%)	
Glands, Cyst	1 (2%)	1 (2%)		2 (4%)	
Glands, Hyperplasia	1 (2%)	1 (2%)	2 (4%)		
Tooth	(31)	(32)	(37)	(35)	
Dysplasia	, ,	, ,	2 (5%)	1 (3%)	
Malformation	29 (94%)	32 (100%)	36 (97%)	33 (94%)	
Peridontal Tissue, Inflammation	7 (23%)	2 (6%)	1 (3%)	9 (26%)	
Pulp, Inflammation	2 (6%)	()	(,		
RDIOVASCULAR SYSTEM					
Blood Vessel Heart	(50) (50)	(50) (50)	(50) (50)	(50) (50)	

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97003 - 08
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Route: SKIN APPLICATION
Species/Strain: MICE/B6C3F1

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

Pathologist: SELLS, D. - JOKINEN, M.

Date Report Reqsted: 08/28/2006 **Time Report Reqsted:** 08:51:09 **First Dose M/F:** 06/25/02 / 06/24/02

Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Cardiomyopathy	9 (18%)	6 (12%)	5 (10%)	3 (6%)	
Infiltration Cellular, Mononuclear Cell	1 (2%)				
Inflammation		1 (2%)			
Mineralization		1 (2%)			
Capillary, Hyperplasia			1 (2%)		
NDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Cytoplasmic Alteration		1 (2%)			
Degeneration	1 (2%)				
Hypertrophy	22 (44%)	16 (32%)	23 (46%)	21 (42%)	
Pigmentation	2 (4%)				
Vacuolization Cytoplasmic	1 (2%)	1 (2%)	1 (2%)		
Subcapsular, Hyperplasia	45 (90%)	46 (92%)	46 (92%)	44 (88%)	
Zona Fasciculata, Hyperplasia	6 (12%)		1 (2%)	5 (10%)	
Adrenal Medulla	(50)	(49)	(50)	(50)	
Hyperplasia		2 (4%)			
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Hyperplasia	26 (52%)	23 (46%)	28 (56%)	25 (50%)	
Parathyroid Gland	(42)	(40)	(43)	(41)	
Cyst			1 (2%)		
Pituitary Gland	(50)	(50)	(49)	(50)	
Cyst	3 (6%)	3 (6%)	4 (8%)	6 (12%)	
Hyperplasia	1 (2%)	1 (2%)	1 (2%)		
Thyroid Gland	(50)	(50)	(50)	(50)	
Cyst	1 (2%)				
Infiltration Cellular, Mononuclear Cell			1 (2%)		
C-cell, Hyperplasia				1 (2%)	
Follicle, Cyst	1 (2%)		2 (4%)		
Follicular Cell, Hyperplasia		3 (6%)	2 (4%)	1 (2%)	

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Coagulating Gland Hyperplasia (0)

(1)

(2) 1 (50%) (1)

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B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Inflammation			1 (50%)		
Epididymis	(50)	(50)	(50)	(50)	
Granuloma Sperm	(30)	(50)	2 (4%)	2 (4%)	
Inflammation	37 (74%)	35 (70%)	35 (70%)	34 (68%)	
Penis	(0)	(2)	(0)	(0)	
Congestion	(0)	1 (50%)	(0)	(0)	
Preputial Gland	(50)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell	(30)	(50)	(30)	1 (2%)	
Inflammation	38 (76%)	30 (60%)	26 (52%)	28 (56%)	
Duct, Ectasia	2 (4%)	2 (4%)	1 (2%)	4 (8%)	
Prostate	(50)	(50)	(50)	(50)	
Atrophy	(30)	(50)	(30)	1 (2%)	
Infiltration Cellular, Mononuclear Cell	20 (40%)	17 (240/)	19 (269/)		
Inflammation, Suppurative	20 (40%)	17 (34%)	18 (36%) 1 (2%)	14 (28%)	
Seminal Vesicle	(50)	(50)	(50)	(50)	
	(50)	(50)	(50)	(50) 1 (2%)	
Atrophy	(50)	(50)	(50)		
Testes	(50)	(50)	(50)	(50)	
Mineralization	1 (2%)		3 (6%)	1 (2%)	
Germinal Epithelium, Atrophy	4 (8%)		3 (6%)	5 (10%)	
HEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(50)	(50)	(50)	
Angiectasis	1 (2%)	. ,	, ,	, ,	
Myelofibrosis	, ,	2 (4%)	2 (4%)	1 (2%)	
Myeloid Cell, Hyperplasia	3 (6%)	4 (8%)	3 (6%)	3 (6%)	
Lymph Node	(0)	(1)	(3)	(1)	
Renal, Hyperplasia, Lymphoid	(-)	()	1 (33%)	()	
Lymph Node, Mandibular	(50)	(50)	(50)	(50)	
Atrophy	1 (2%)	()	()	1 (2%)	
Hemorrhage	. (= /3)	1 (2%)		. (= /3)	
Hyperplasia, Lymphoid	2 (4%)	1 (2%)		1 (2%)	
Hyperplasia, Plasma Cell	2 (170)	4 (8%)	1 (2%)	. (= /0)	
Pigmentation	1 (2%)	1 (2%)	. (270)		
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Atrophy	1 (2%)	1 (2%)	1 (2%)	1 (2%)	
Hemorrhage	1 (2%)	1 (2/0)	1 (2%)	1 (2%)	
Hyperplasia, Histiocytic	1 (2/0)		1 (2%)	1 (2/0)	
Hyperplasia, Histocytic Hyperplasia, Lymphoid	1 (2%)	2 (4%)	1 (2%)	1 (2%)	
Hyperplasia, Eymphold Hyperplasia, Plasma Cell	1 (2/0)		1 (2/0)	1 (2/0)	
Inflammation, Suppurative	1 /20/\	2 (4%)			
ililiailililailoli, Suppuralive	1 (2%)				

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B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Inflammation, Granulomatous	1 (2%)	(40)	(50)	(50)	
Spleen Hematopoietic Cell Proliferation	(50) 19 (38%)	(49) 13 (27%)	(50) 20 (40%)	(50) 13 (26%)	
Hyperplasia, Histiocytic Hyperplasia, Lymphoid	8 (16%)	12 (24%)	12 (24%)	1 (2%) 11 (22%)	
Infiltration Cellular, Polymorphonuclear Capsule, Degeneration	1 (2%)		1 (2%)		
Lymphoid Follicle, Atrophy Red Pulp, Atrophy	2 (4%) 1 (2%)	4 (8%) 4 (8%)	1 (2%)	1 (2%) 2 (4%)	
Thymus	(47)	(48)	(46)	(46)	
Atrophy	22 (47%)	19 (40%)	27 (59%)	23 (50%)	
Cyst		2 (4%)		1 (2%)	
INTEGUMENTARY SYSTEM					
Skin	(50)	(50)	(50)	(50)	
Hyperplasia, Squamous	, ,	, ,	1 (2%)	. ,	
Inflammation	4 (00/)		2 (4%)		
Inflammation, Chronic Active Ulcer	1 (2%) 1 (2%)		2 (4%)		
Site Of Application, Hyperplasia	6 (12%)	12 (24%)	37 (74%)	50 (100%)	
Site Of Application, Inflammation, Chronic	4 (8%)	1 (2%)	7 (14%)	10 (20%)	
Active	,	,	,	, ,	
Site Of Application, Ulcer			1 (2%)	3 (6%)	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Osteosclerosis Skeletal Muscle	1 (2%) (0)	(0)	(1)	(0)	
Skeletal Muscle	(0)	(0)	(1)	(0)	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Hemorrhage Meninges, Infiltration Cellular, Mononuclear Cell		1 (2%)	1 (2%)	1 (2%)	
Spinal Cord	(0)	(0)	(0)	(1)	
Atrophy	. ,	• •		1 (100%)	

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B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	
Hemorrhage		1 (2%)		1 (2%)	
Infiltration Cellular, Mononuclear Cell	1 (2%)				
Inflammation	6 (12%)	5 (10%)		1 (2%)	
Pigmentation	1 (2%)	1 (2%)			
Thrombosis	1 (2%)				
Alveolar Epithelium, Hyperplasia	6 (12%)			4 (8%)	
Alveolus, Infiltration Cellular, Histiocyte	5 (10%)	8 (16%)	2 (4%)	3 (6%)	
Bronchiole, Hyperplasia	,	,	1 (2%)	1 (2%)	
Nose	(50)	(50)	(50)	(50)	
Inflammation, Suppurative	()	3 (6%)	()	()	
Polyp, Inflammatory	1 (2%)	,	1 (2%)		
Glands, Dilatation	(,		1 (2%)		
Nerve, Atrophy			1 (2%)		
Respiratory Epithelium, Hyperplasia			1 (2%)		
Respiratory Epithelium, Inflammation	7 (14%)		1 (2%)		
Respiratory Epithelium, Metaplasia	(1175)	1 (2%)	(=,-,		
Trachea	(50)	(50)	(50)	(50)	
Inflammation	()	()	()	1 (2%)	
Glands, Cyst	1 (2%)			. (=,=)	
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	
Atrophy		1 (2%)			
Cornea, Inflammation				2 (4%)	
Lens, Degeneration	1 (2%)	1 (2%)			
Retina, Atrophy	2 (4%)	1 (2%)			
Harderian Gland	(50)	(50)	(50)	(50)	
Fibrosis, Focal		1 (2%)			
Infiltration Cellular, Mononuclear Cell	31 (62%)	30 (60%)	26 (52%)	30 (60%)	
Inflammation	1 (2%)		1 (2%)		
Epithelium, Hyperplasia	2 (4%)	3 (6%)		4 (8%)	
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	

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Lab: BAT

B6C3F1 MICE MALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Cyst Hemorrhage	3 (6%)	8 (16%)	2 (4%)	6 (12%) 1 (2%)	
Infarct	4 (8%)	1 (2%)	4 (8%)	3 (6%)	
Infiltration Cellular, Mononuclear Cell	1 (2%)	1 (2%)	. (675)	3 (373)	
Inflammation	2 (4%)	(,			
Mineralization	44 (88%)	45 (90%)	46 (92%)	43 (86%)	
Nephropathy	48 (96%)	41 (82%)	48 (96%)	48 (96%)	
Papilla, Renal Tubule, Necrosis		1 (2%)			
Renal Tubule, Hyperplasia	12 (24%)	12 (24%)	12 (24%)	7 (14%)	
Urinary Bladder	(50)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell Transitional Epithelium, Hyperplasia	22 (44%)	19 (38%)	23 (46%) 2 (4%)	27 (54%)	

*** END OF MALE ***

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B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Disposition Summary					
Animals Initially in Study Early Deaths	50	50	50	50	
Moribund Sacrifice	10	11	14	11	
Natural Death	7	3	6	4	
Survivors					
Natural Death		1			
Terminal Sacrifice	33	35	30	35	
Animals Examined Microscopically	50	50	50	50	
ALIMENTARY SYSTEM					
Esophagus	(50)	(50)	(50)	(50)	
Gallbladder	(50)	(49)	(50)	(50)	
Cyst		1 (2%)			
Inflammation		3 (6%)	5 (10%)	2 (4%)	
Intestine Small, Duodenum	(50)	(50)	(50)	(50)	
Intestine Small, Jejunum	(50)	(50)	(50)	(50)	
Hyperplasia, Lymphoid			1 (2%)		
Inflammation	3 (6%)	1 (2%)			
Necrosis, Fatty	1 (2%)	()	4	4	
Liver	(50)	(50)	(50)	(50)	
Angiectasis	4 (00()	1 (2%)	1 (2%)		
Basophilic Focus	1 (2%)	3 (6%)	0 (00()	0 (400)	
Clear Cell Focus	14 (28%)	13 (26%)	3 (6%)	8 (16%)	
Cyst Eosinophilic Focus	6 (400/)	1 (2%)	4 (00/)	4 (00/)	
Fatty Change, Focal	6 (12%) 1 (2%)	3 (6%)	4 (8%) 1 (2%)	4 (8%)	
Fatty Change, Focal Fatty Change, Diffuse	1 (2%)		4 (8%)	4 (8%)	
Fatty Change, Diliuse Fibrosis	1 (2/0)	1 (2%)	4 (0 /0)	4 (0 /0)	
Hematopoietic Cell Proliferation	6 (12%)	3 (6%)	3 (6%)	5 (10%)	
Infiltration Cellular, Lymphocyte	J (1270)	J (070)	1 (2%)	5 (1070)	
Inflammation	35 (70%)	42 (84%)	37 (74%)	41 (82%)	
Mixed Cell Focus	13 (26%)	10 (20%)	5 (10%)	7 (14%)	
Necrosis	3 (6%)	2 (4%)	8 (16%)	4 (8%)	
Pigmentation	4 (8%)	4 (8%)	1 (2%)	1 (2%)	
Tension Lipidosis	5 (10%)	2 (4%)	4 (8%)	6 (12%)	
Vacuolization Cytoplasmic	· /	/	1 (2%)	()	

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B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Handa and the and and a	4 (00()				
Hepatocyte, Hypertrophy	1 (2%)	(0)	(6)	(40)	
Mesentery	(10)	(9)	(6)	(10)	
Fat, Necrosis	9 (90%)	9 (100%)	6 (100%)	9 (90%)	
Pancreas	(50)	(50)	(50)	(50)	
Cyst	1 (2%)	2 (4%)	47 (240/)	04 (400/)	
Infiltration Cellular, Mononuclear Cell	17 (34%)	15 (30%)	17 (34%)	24 (48%)	
Inflammation	4 (20()	3 (6%)			
Acinus, Atrophy	1 (2%)	3 (6%)	(50)	(50)	
Salivary Glands	(50)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell	31 (62%)	32 (64%)	33 (66%)	36 (72%)	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Cyst	1 (2%)			0 (40()	
Hyperkeratosis	1 (2%)			2 (4%)	
Hyperplasia, Squamous	2 (4%)			2 (4%)	
Inflammation				2 (4%)	
Ulcer	(50)	(=0)	(50)	2 (4%)	
Stomach, Glandular	(50)	(50)	(50)	(50)	
Cyst	1 (2%)	0 (404)		4 (00()	
Erosion		2 (4%)	4 (00()	1 (2%)	
Mineralization	- (12()	= ()	1 (2%)	1 (2%)	
Glands, Cyst	2 (4%)	5 (10%)	4 (8%)	5 (10%)	
Glands, Hyperplasia	(5)	1 (2%)	4.0	443	
Tooth	(3)	(4)	(4)	(1)	
Malformation	3 (100%)	3 (75%)	3 (75%)	1 (100%)	
Peridontal Tissue, Inflammation		1 (25%)	1 (25%)		
CARDIOVASCULAR SYSTEM					
Blood Vessel	(50)	(50)	(50)	(50)	
Hyperplasia		1 (2%)			
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	10 (20%)	2 (4%)	9 (18%)	14 (28%)	
Infiltration Cellular, Mononuclear Cell	1 (2%)		1 (2%)	1 (2%)	
Inflammation				2 (4%)	
Mineralization	1 (2%)				
Thrombosis				1 (2%)	
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	

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Route: SKIN APPLICATION
Species/Strain: MICE/B6C3F1

Clitoral Gland

Duct, Cyst

Angiectasis

Ovary

Inflammation

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

Pathologist: SELLS, D. - JOKINEN, M.

Date Report Reqsted: 08/28/2006 **Time Report Reqsted:** 08:51:09 **First Dose M/F:** 06/25/02 / 06/24/02

Lab: BAT

(50)

7 (14%)

(50)

1 (2%)

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Hematopoietic Cell Proliferation	2 (4%)			1 (2%)	
Hypertrophy	2 (4%)	2 (4%)		1 (2%)	
Inflammation	1 (2%)	_ (· / · /		1 (2%)	
Vacuolization Cytoplasmic	(/		1 (2%)	1 (2%)	
Capsule, Necrosis, Fatty	1 (2%)		(/	()	
Subcapsular, Hyperplasia	50 (100%)	49 (98%)	50 (100%)	49 (98%)	
Zona Fasciculata, Hyperplasia	2 (4%)	2 (4%)	1 (2%)	1 (2%)	
Adrenal Medulla	(50)	(50)	(50)	(50)	
Hyperplasia	1 (2%)	2 (4%)	,	3 (6%)	
Vacuolization Cytoplasmic	,	,		1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Hyperplasia	4 (8%)	,	,	1 (2%)	
Parathyroid Gland	(38)	(40)	(40)	(41)	
Cyst	,	,	,	1 (2%)	
Inflammation, Chronic Active				1 (2%)	
Pituitary Gland	(50)	(50)	(50)	(50)	
Angiectasis	1 (2%)	2 (4%)	1 (2%)	1 (2%)	
Cyst	1 (2%)	1 (2%)	,	2 (4%)	
Pars Distalis, Angiectasis	, ,	1 (2%)		` ,	
Pars Distalis, Hyperplasia	9 (18%)	13 (26%)	16 (32%)	12 (24%)	
Pars Intermedia, Hyperplasia	, ,	1 (2%)	, ,	,	
Thyroid Gland	(50)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell	3 (6%)	2 (4%)	3 (6%)	3 (6%)	
Inflammation, Suppurative	1 (2%)	, ,	, ,	, ,	
C-cell, Hyperplasia	, ,	1 (2%)			
Follicle, Cyst	2 (4%)	, ,			
	1 (2%)	3 (6%)	1 (2%)	1 (2%)	
Follicular Cell, Hypertrophy	1 (2%)	, ,	, ,	, ,	
Follicle, Öyst Follicular Cell, Hyperplasia		3 (6%)	1 (2%)	1 (2%)	
NERAL BODY SYSTEM					

(50)

18 (36%)

(50)

(49)

5 (10%)

(50)

1 (2%)

(50)

2 (4%)

1 (2%)

(50)

3 (6%)

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97003 - 08
Test Type: CHRONIC
Route: SKIN APPLICATION
Species/Strain: MICE/B6C3F1

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

Pathologist: SELLS, D. - JOKINEN, M.

Date Report Reqsted: 08/28/2006 **Time Report Reqsted:** 08:51:09 **First Dose M/F:** 06/25/02 / 06/24/02

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Out	7 (4 10)	40 (000)	40 (000)	40 (000)	
Cyst Hemorrhage	7 (14%)	10 (20%)	19 (38%) 1 (2%)	13 (26%)	
Inflammation, Granulomatous		1 (2%)	1 (2%)		
Mineralization		1 (2%)			
Pigmentation		1 (2%)			
Thrombosis	1 (2%)	1 (2%)	2 (4%)		
Periovarian Tissue, Necrosis	1 (2%)	1 (270)	2 (170)		
Uterus	(50)	(50)	(50)	(50)	
Angiectasis	2 (4%)	1 (2%)	(00)	(00)	
Inflammation, Suppurative	_ (. , . ,	(= / -/ /		1 (2%)	
Thrombosis			1 (2%)	(/	
Endometrium, Hyperplasia, Cystic	50 (100%)	49 (98%)	48 (96%)	48 (96%)	
Vagina	(0)	(0)	(3)	(0)	
HEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(50)	(50)	(50)	
Angiectasis		1 (2%)	1 (2%)		
Atrophy, Focal	3 (6%)		1 (2%)	2 (4%)	
Myelofibrosis	27 (54%)	29 (58%)	27 (54%)	27 (54%)	
Myeloid Cell, Hyperplasia	2 (4%)	(2)	(5)	4 (8%)	
Lymph Node	(8)	(6)	(6)	(4)	
Hyperplasia, Plasma Cell			4 (470()	1 (25%)	
Iliac, Ectasia		4 (470()	1 (17%)		
Inguinal, Ectasia		1 (17%)		4 (050()	
Lumbar, Congestion		2 (220()	2 (220()	1 (25%)	
Lumbar, Ectasia		2 (33%)	2 (33%)	4 (250/)	
Lumbar, Hyperplasia, Histiocytic Mediastinal, Congestion				1 (25%) 1 (25%)	
Mediastinal, Congestion Mediastinal, Hyperplasia, Histiocytic				1 (25%)	
Renal. Ectasia	2 (25%)		1 (17%)	1 (23 /6)	
Lymph Node, Mandibular	(50)	(50)	(50)	(50)	
Atrophy	(50)	(55)	1 (2%)	(55)	
Ectasia		1 (2%)	1 (270)		
Hyperplasia, Lymphoid	1 (2%)	4 (8%)		5 (10%)	
Hyperplasia, Plasma Cell	1 (2%)	. (373)		2 (.3/0)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Congestion, Chronic	(/	(/	()	1 (2%)	
Hyperplasia, Histiocytic				1 (2%)	
Hyperplasia, Lymphoid		3 (6%)	3 (6%)	2 (4%)	
Hyperplasia, Plasma Cell	1 (2%)	1 (2%)	1 (2%)	2 (4%)	

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TDMS No. 97003 - 08
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Species/Strain: MICE/B6C3F1

1,2-DIBROMO-2,4-DICYANOBUTANE

CAS Number: 35691-65-7

Pathologist: SELLS, D. - JOKINEN, M.

Date Report Reqsted: 08/28/2006 **Time Report Reqsted:** 08:51:09 **First Dose M/F:** 06/25/02 / 06/24/02

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
Inflammation		1 (2%)			
Spleen Fibrosis	(50)	(50) 1 (2%)	(50)	(50)	
Hematopoietic Cell Proliferation	16 (32%)	19 (38%)	18 (36%)	22 (44%)	
Hyperplasia, Lymphoid	13 (26%)	19 (38%)	19 (38%)	16 (̀32%)́	
Pigmentation	7 (14%)	5 (10%)	8 (16%)	6 (12%)	
Lymphoid Follicle, Atrophy	1 (2%)		4 (8%)	1 (2%)	
Red Pulp, Atrophy Thymus	1 (2%) (47)	(47)	4 (8%) (48)	3 (6%) (50)	
Atrophy	11 (23%)	11 (23%)	13 (27%)	17 (34%)	
Hyperplasia, Atypical	(== /-5/	1 (2%)	(=: /-/)	(5 175)	
Hyperplasia, Lymphoid		5 (11%)	7 (15%)	4 (8%)	
INTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(49)	(50)	(50)	
Hyperplasia Skin	(50)	(50)	1 (2%) (50)	(50)	
Site Of Application, Hyperplasia	(30)	12 (24%)	37 (74%)	(30) 49 (98%)	
Site Of Application, Inflammation, Chronic		9 (18%)	30 (60%)	28 (56%)	
Active					
Site Of Application, Ulcer		1 (2%)	2 (4%)	3 (6%)	
Subcutaneous Tissue, Inflammation, Granulomatous				1 (2%)	
Subcutaneous Tissue, Necrosis, Fatty				1 (2%)	
Subcutaneous Tissue, Pigmentation				1 (2%)	
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Arthrosis Osteopetrosis		1 (2%)		1 (2%)	
Skeletal Muscle	(1)	(1)	(1)	(1)	
	(.,	(.,	(.,	(.,	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Hemorrhage			4 (00()	1 (2%)	
Pigmentation Neuron, Necrosis			1 (2%)	1 (2%)	
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B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG	
RESPIRATORY SYSTEM					
Lung	(50)	(50)	(50)	(50)	
Hemorrhage	, ,	2 (4%)	. ,	2 (4%)	
Inflammation	1 (2%)	1 (2%)		3 (6%)	
Pigmentation				1 (2%)	
Alveolar Epithelium, Hyperplasia	1 (2%)	1 (2%)		2 (4%)	
Alveolus, Infiltration Cellular, Histiocyte	2 (4%)	1 (2%)	2 (4%)	1 (2%)	
Mediastinum, Inflammation		1 (2%)			
Serosa, Fibrosis			1 (2%)		
Nose	(50)	(50)	(50)	(50)	
Glands, Cyst	- 4			1 (2%)	
_Respiratory Epithelium, Inflammation	2 (4%)	(==)	(==)	()	
Trachea	(50)	(50)	(50)	(50)	
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	
Cornea, Inflammation, Suppurative	, ,	1 (2%)	. ,	,	
Lens, Degeneration	2 (4%)	2 (4%)			
Optic Nerve, Degeneration			1 (2%)		
Harderian Gland	(50)	(50)	(50)	(50)	
Infiltration Cellular, Mononuclear Cell	31 (62%)	33 (66%)	36 (72%)	36 (72%)	
Epithelium, Hyperplasia	1 (2%)	1 (2%)	4 (8%)	3 (6%)	
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	
Accumulation, Hyaline Droplet	()	1 (2%)	(,	()	
Amyloid Deposition	2 (4%)	,	1 (2%)		
Cyst	,		1 (2%)		
Degeneration			. ,	1 (2%)	
Infarct	3 (6%)	2 (4%)	8 (16%)	4 (8%)	
Inflammation	2 (4%)		·		
Metaplasia, Osseous		1 (2%)		1 (2%)	
Mineralization	14 (28%)	8 (16%)	4 (8%)	3 (6%)	
Nephropathy	16 (32%)	15 (30%)	16 (32%)	18 (36%)	
Pigmentation			1 (2%)		
Pelvis, Dilatation			1 (2%)		

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Lab: BAT

B6C3F1 MICE FEMALE	0 MG/KG	0.6 MG/KG	2 MG/KG	6 MG/KG
Danel Tubula Uhmamlasia	4 (20/)	2 (40/)		
Renal Tubule, Hyperplasia Renal Tubule, Necrosis	1 (2%) 1 (2%)	2 (4%)		
Urinary Bladder	(50)	(50)	(50)	(50)
Infiltration Cellular, Mononuclear Cell	33 (66%)	37 (74%)	38 (76%)	38 (76%)

*** END OF REPORT ***

TDMS No. 97003 - 08

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